

# **Joint CTEQ Meeting and 7th International Conference on Physics Opportunities at an EIC (POETIC 7)**

**Monday 14 November 2016 - Friday 18 November 2016**

**Temple University**

## **Book of abstracts**

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**Welcome**

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**Plenary Session 1 (Chair: Andreas Metz) / 51**

**Unpolarized and helicity PDFs at an EIC**

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**Plenary Session 1 (Chair: Andreas Metz) / 52**

**GPDs at an EIC**

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**Plenary Session 2 (Chair: Daniel Boer) / 53**

**TMDs at an EIC**

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**Nuclear PDFs at an EIC**

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**Plenary Session 3 (Chair: Yuri Kovchegov) / 55**

**Parton saturation at an EIC**

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**Plenary Session 3 (Chair: Yuri Kovchegov) / 56**

**eA collective effects at an EIC**

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**Parton propagation and energy loss at an EIC**

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**Plenary Session 4 (Chair: James Napolitano) / 58**

**Electroweak and BSM physics at an EIC**

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**Plenary Session 4 (Chair: James Napolitano) / 59**

**PDF from hadronic tensor on the Lattice and connected sea evolution**

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**Plenary Session 4 (Chair: James Napolitano) / 60**

**Hadron Mass in QCD**

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**Plenary Session 5 (Chair: Nestor Armesto) / 61**

**A future electron-ion collider at Brookhaven National Lab**

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## **A future electron-ion collider at Jefferson Lab**

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## **A future electron-ion collider plan at HIAF in China (remote talk)**

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## **Development of the LHeC**

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**Parallel Session 1A (Chair: Emanuele Nocera) / 70**

## **Helicity evolution at small x**

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## **Small-x asymptotics of the quark helicity distribution**

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## **Towards universal fit of PDFs, spin-dependent PDFs, and fragmentation functions**

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**The xFitter Project: an open source QCD fit framework**

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**Precision heavy flavor contributions to neutral and charged current interactions in DIS (remote talk)**

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**Precision jet physics in DIS**

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**Experimental aspects of jet physics in ep collisions**

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**Opportunities with jet physics in eA collisions**

**Parallel Session 2A (Chair: Martha Constantinou) / 82**

**Lattice QCD calculations of the quark and gluon contributions to the spin and momentum of the nucleon**

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**Direct calculation of PDFs in Lattice QCD**

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**Tomographic image of the proton from DVCS data**

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**GPDs on and off the lattice**

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**Partonic orbital angular momentum and Lorentz invariance relations**

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**Short-range structure of nuclei and short-range correlations**

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**Small-x collective effects in eA scattering**

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**Color dipole approach to Drell-Yan and heavy quarkonia production at RHIC and LHC**

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**Nuclear gluons probed with heavy quarks at an electron-ion collider**

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**Prospects for low-x physics at RHIC**

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**Parallel Session 3A (Chair: Zhongbo Kang) / 92**

**Probing the inner structure of nucleons: TMDs at an EIC (remote talk)**

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**Parallel Session 3A (Chair: Zhongbo Kang) / 93**

**Transverse momentum dependent gluon distributions at the EIC**

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**TMDs at small x**

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**Matching TMD factorization and collinear factorization**

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**Parallel Session 3B (Chair: Rolf Ent) / 96**

**The X,Y,Z states from Lattice QCD: progress and prospects**

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**Tensor-polarized structure functions for spin-one hadron**

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### **Studying photon structure at EIC**

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### **Nucleon transverse momentum-dependent parton distributions from Lattice QCD**

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### **What do we know about transversity distributions of the nucleon?**

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### **Twist-3 spin observables and multi-parton correlations in electron-proton collisions at an EIC**

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### **The RHIC pp/pA physics -- a portal to the EIC**

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### **Inclusive jet production in electron-nucleon collisions**

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### **The jet fragmentation function in pp and ep collisions**

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**Impact of potential LHeC measurements on parton distribution functions (remote talk)**

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**Opportunities for Higgs physics at future lepton-nucleon colliders**

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**High Q<sup>2</sup> physics at the LHeC and FCC-eh (top, electroweak and BSM)**

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**The hard Pomeron structure: from HERA and the LHC to the EIC**

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**Next-generation nuclear DIS: spectator tagging with light ions at an EIC**

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**Evidence of strong proton shape fluctuations from incoherent diffraction**

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**Azimuthal anisotropy and the distribution of linearly polarized gluons in DIS dijet production at high energy**

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**Azimuthal correlations in p+p/A collisions and their relation to proton structure**

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**Medium induced transverse momentum broadening in hard processes**

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**Jet quenching and the relation between  $\hat{q}$  and the TMDPDF**

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**Small-x evolution beyond the eikonal approximation**

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**Rapidity factorization and EIC**

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**Forward dijets in p-A and gamma-A collisions within the small-x improved TMD factorization**

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**Current fragmentation at the kinematics of the EIC**

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**Vector boson production in pPb and PbPb collisions at the LHC and its impact on ncteqfit PDFs**

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**Determining  $\alpha_s$  and nPDFs from jets in DIS and photoproduction**

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**Accessing quark orbital angular momentum through GTMDs**

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**Unique experimental opportunities at the EIC**

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**QCD theory, LHC**

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**Precision goals for QCD at the high-luminosity LHC**

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**EIC and LHeC side by side**

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**Drell-Yan pair production at SeaQuest**

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**Prompt photon production with POWHEG**

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**CTEQ physics session (open) / 130**

**Update on nCTEQ PDFs**

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